

In the Claims:

1. (Previously presented) A method for presenting results data in a distributed computing environment, comprising:

a service in the distributed computing environment generating results data for a client in the distributed computing environment;

a data presentation process accessing a presentation schema in the distributed computing environment, wherein the presentation schema includes information for presenting results data for clients in the distributed computing environment, wherein the presentation schema is provided by the service, wherein the data presentation process and the service execute on separate devices in the distributed computing environment;

the data presentation process accessing the results data; and

the data presentation process presenting the results data for the client in accordance with the information from the presentation schema.

2. (Canceled)

3. (Previously presented) The method as recited in claim 1, wherein said generating the results data is performed in response to the client sending a request message in a data representation language to the service, wherein the request message requests the service to perform a function on behalf of the client, and wherein the function generates the results data when performed by the service.

4. (Original) The method as recited in claim 3, wherein the data representation language is eXtensible Markup Language (XML).

5. (Previously presented) The method as recited in claim 1, wherein said accessing results data for a client in the distributed computing environment comprises receiving the results data from the service in one or more messages in a data representation language.

6. (Previously presented) The method as recited in claim 1, wherein said generating the results data comprises the service storing the results data on a results space in the distributed computing environment.

7. (Original) The method as recited in claim 6, wherein said accessing results data for a client in the distributed computing environment comprises accessing the results data from the results space.

8. (Original) The method as recited in claim 6, wherein said accessing results data for a client in the distributed computing environment comprises:

providing a results advertisement for the results data stored on the results space,
wherein the results advertisement includes information for enabling access
of the results data; and

accessing the results data from the results space in accordance with the results
advertisement.

9. (Canceled)

10. (Original) The method as recited in claim 1, wherein the presentation schema is comprised in a presentation schema advertisement comprised on a storage device in the distributed computing environment, wherein the storage device is operable to store a plurality of presentation schema advertisements, and wherein said accessing the presentation schema comprises accessing the presentation schema advertisement from the storage device through a space service.

11. (Previously presented) The method as recited in claim 10, wherein the presentation schema advertisement is an eXtensible Markup Language (XML) document.

12. (Original) The method as recited in claim 1, wherein the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in an audio format.

13. (Original) The method as recited in claim 1, wherein the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in a visual format.

14. (Original) The method as recited in claim 1, wherein the information for presenting results data in the presentation schema includes information to facilitate the display of results data to the client on a display device.

15. (Original) The method as recited in claim 1, wherein the results data comprises a plurality of data elements, and wherein the presentation schema comprises a plurality of presentation elements each including information describing presentation characteristics of one or more of the plurality of data elements.

16. (Currently amended) The method as recited in claim 15, wherein each of the plurality of presentation elements further comprises information for locating the one or more data elements associated with the presentation element, and wherein said presenting the results data for the client in accordance with the information from the presentation schema comprises:

accessing a ~~first~~ presentation element in the plurality of presentation elements;

accessing one or more data elements associated with the ~~first~~ presentation element in accordance with the information for locating the one or more data elements included in the ~~first~~ presentation element; and

presenting the one or more data elements for the client in accordance with the information describing the presentation characteristics of the one or more data elements included in the ~~first~~ presentation element.

17. (Currently amended) The method as recited in claim 16, further comprising repeating said accessing a ~~first~~ presentation element, said accessing one or more data elements, and said presenting the one or more data elements for each of the plurality of presentation elements.

18. (Canceled)

19. (Previously presented) The method as recited in claim 1, wherein the client is executing within a first device in the distributed computing environment, and wherein the data presentation process is executing within a second device in the distributed computing environment.

20. (Previously presented) The method as recited in claim 1, wherein the data presentation process accessing the results data comprises:

the client receiving the results data from the service; and

the client providing the results data to the data presentation process.

21. (Previously presented) The method as recited in claim 1, wherein the data presentation process accessing the results data comprises:

the client receiving information for accessing the results data from the service;
and

the client providing the information for accessing the results data to the data
presentation process.

22. (Previously presented) The method as recited in claim 1, wherein the data presentation process in the distributed computing environment accessing the presentation schema comprises:

the client receiving information for accessing the presentation schema; and

the client providing the information for accessing the presentation schema to the
data presentation process.

23. (Previously presented) The method as recited in claim 1, wherein the data presentation process in the distributed computing environment accessing the presentation schema comprises:

the client receiving the presentation schema; and

the client providing the presentation schema to the data presentation process.

24. (Previously presented) A distributed computing system, comprising:

a service device configured to generate results data;

a data presentation device;

a first device separate from the service device configured to:

access a presentation schema, wherein the presentation schema includes information for presenting the results data, wherein the presentation schema is provided by the service device;

access the results data generated by the service device; and

present the results data on the data presentation device in accordance with the information in the presentation schema for the results data.

25. (Original) The system as recited in claim 24, further comprising a client device configured to send a request message in a data representation language to the service device, wherein the service device is configured to perform a function on behalf of the client device in response to the request message, and wherein the function is configured to generate the results data when performed by the service device.

26. (Original) The system as recited in claim 24, wherein, in said accessing the results data, the first device is further configured to receive the results data from the service device in one or more data representation language messages, wherein the data representation language is eXtensible Markup Language (XML).

27. (Original) The system as recited in claim 24, further comprising:

a results space;

wherein, in said generating the results data, the service device is further configured to store the results data to the results space; and

wherein the service device is further configured to provide a results advertisement for the results data stored on the results space, wherein the results advertisement includes information for enabling access of the results data; and

wherein the first device is further configured to access the results data from the results space in accordance with the results advertisement.

28. (Original) The system as recited in claim 24, further comprising:

a storage device, wherein the presentation schema is comprised in a presentation schema advertisement comprised on the storage device; and

a space service for accessing advertisements comprised on the storage device;

wherein, in said accessing the presentation schema, the first device is further configured to access the presentation schema advertisement from the storage device through the space service.

29. (Previously presented) The system as recited in claim 28, wherein the presentation schema advertisement is an eXtensible Markup Language (XML) document.

30. (Original) The system as recited in claim 24, wherein the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in an audio format, and wherein, in said presenting the results data on the data presentation device, the first device is further configured to present the results data in an audio format on the data presentation device.

31. (Original) The system as recited in claim 24, wherein the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in a visual format, and wherein, in said presenting the results data on the data presentation device, the first device is further configured to present the results data in a visual format on the data presentation device.

32. (Original) The system as recited in claim 31, wherein the data presentation device is a display device.

33. (Currently amended) The system as recited in claim 24, wherein the results data comprises a plurality of data elements, wherein the presentation schema comprises a plurality of presentation elements each including information describing presentation characteristics of one or more of the plurality of data elements, wherein each of the plurality of presentation elements further comprises information for locating the one or more data elements associated with the presentation element, and wherein, in said presenting the results data on the data presentation device, the first device is further configured to:

access a ~~first~~ presentation element in the plurality of presentation elements;

access one or more data elements associated with the ~~first~~ presentation element in accordance with the information for locating the one or more data elements included in the ~~first~~ presentation element; and

present the one or more data elements on the data presentation device in accordance with the information describing the presentation characteristics of the one or more data elements included in the ~~first~~ presentation element.

34. (Currently amended) The system as recited in claim 33, wherein the first device is further configured to repeat said accessing a ~~first~~ presentation element, said accessing one or more data elements, and said presenting the one or more data elements for each of the plurality of presentation elements.

35. (Original) The system as recited in claim 24, wherein the first device comprises a data presentation process executable on the first device, wherein said accessing a presentation schema in the distributed computing environment, said accessing

results data for a client in the distributed computing environment, and said presenting the results data are performed by the data presentation process.

36. (Original) The system as recited in claim 35, wherein the first device further comprises a client process executable on the first device and configured to send a request message in a data representation language to the service device, wherein the service device is configured to perform a function on behalf of the client process in response to the request message, and wherein the function is configured to generate the results data when performed by the service device.

37. (Original) The system as recited in claim 24, wherein the first device comprises the data presentation device.

38. (Original) The system as recited in claim 24, wherein the first device further comprises:

a data presentation process executable on the first device; and

a client process executable on the first device, wherein said access the results data generated by the service device is performed by the client process, and wherein the client process is configured to provide the results data to the data presentation process;

wherein said presenting the results data is performed by the data presentation process.

39. (Original) The system as recited in claim 24, wherein the first device further comprises:

a data presentation process executable on the first device; and

a client process executable on the first device, configured to:

access information for accessing the results data generated by the service device; and

provide the information for accessing the results data to the data presentation process;

wherein said accessing the results data generated by the service device is performed by the data presentation process in accordance with the information for accessing the results data provided by the client process, and wherein said presenting the results data is performed by the data presentation process.

40. (Original) The system as recited in claim 24, wherein the first device further comprises:

a data presentation process executable on the first device; and

a client process executable on the first device, configured to:

receive information for accessing the presentation schema; and

provide the information for accessing the presentation schema to the data presentation process;

wherein said accessing a presentation schema is performed by the data presentation process in accordance with the information for accessing the presentation schema provided by the client process.

41. (Original) The system as recited in claim 24, wherein the first device further comprises:

a data presentation process executable on the first device; and

a client process executable on the first device, configured to:

access the presentation schema; and

provide the presentation schema to the data presentation process;

wherein said presenting the results data is performed by the data presentation process in accordance with the presentation schema provided by the client process.

42. (Previously presented) A distributed computing system, comprising:

a storage device; and

a service device configured to:

provide a presentation schema advertisement;

store the presentation schema advertisement on the storage device; and

produce results data on behalf of a client in the distributed computing system;

wherein the presentation schema advertisement includes information for enabling access to a presentation schema for presenting the results data.

43. (Original) The system as recited in claim 42, wherein the service device is further configured to generate the results data for the client in response to receiving a request for the results data.

44. (Original) The system as recited in claim 42, further comprising a space service configured to provide the presentation schema advertisement stored on the storage device to the client, wherein the client is operable to display the results data in accordance with the information for presenting the results data included in the presentation schema advertisement.

45. (Original) The system as recited in claim 42, further comprising:

a results space configured to store results data;

wherein the service device is further configured to store the results data on the results space.

46. (Currently amended) A device, comprising:

a data presentation component; and

a client component configured to:

access a presentation schema provided by a service in a distributed computing environment, wherein the presentation schema includes information for presenting results data generated by the service, and wherein the client component and the service executes on separate devices a different device in the distributed computing environment than the device comprising the data presentation component and the client component;

access the results data generated by the service; and

~~present~~ provide the results data ~~on the data presentation component in accordance with the information in~~ and the presentation schema for the results data to the data presentation component;

wherein the data presentation component is configured to present the results data on the device in accordance with the information for presenting the results data in the presentation schema.

47. (Original) The device as recited in claim 46, wherein the client component is further configured to send a message to the service requesting the results data, wherein the service is operable to generate the results data for the client in response to receiving the message.

48. (Currently amended) A tangible computer accessible medium comprising program instructions, wherein the program instructions are computer-executable to implement:

a data presentation process configured to:

~~accessing~~ access a presentation schema in a distributed computing environment, wherein the presentation schema includes information for presenting results data for clients in the distributed computing environment, wherein the presentation schema is provided by a service in the distributed computing environment, wherein the data presentation process and the service execute on separate devices in the distributed computing environment;

~~accessing~~ access results data for a client in the distributed computing environment wherein the results data are generated by the service; and

~~presenting~~ present the results data for the client in accordance with the information from the presentation schema.

49. (Canceled)

50. (Currently amended) The medium as recited in claim 48, wherein the presentation schema is comprised in a presentation schema advertisement comprised on a storage device in the distributed computing environment, wherein the storage device is operable to store a plurality of presentation schema advertisements, and wherein, ~~in said~~ ~~accessing to access~~ the presentation schema, the ~~program instructions are further computer-executable to implement accessing data presentation process is configured to access~~ the presentation schema advertisement from the storage device through a space service associated with the storage device.

51. (Previously presented) The medium as recited in claim 50, wherein the presentation schema advertisement is an eXtensible Markup Language (XML) document.

52. (Previously presented) The medium as recited in claim 48, wherein the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in an audio format.

53. (Previously presented) The medium as recited in claim 48, wherein the information for presenting results data in the presentation schema includes information to facilitate the display of results data to the client on a display device.

54. (Previously presented) The medium as recited in claim 48, wherein the results data comprises a plurality of data elements, and wherein the presentation schema

comprises a plurality of presentation elements each including information describing presentation characteristics of one or more of the plurality of data elements.

55. (Currently amended) The medium as recited in claim 54, wherein each of the plurality of presentation elements further comprises information for locating the one or more data elements associated with the presentation element, and wherein, ~~in said presenting to present~~ the results data for the client in accordance with the information from the presentation schema, ~~the program instructions are further computer-executable to implement the data presentation process is configured to:~~

~~accessing access~~ a ~~first~~ presentation element in the plurality of presentation elements;

~~accessing access~~ one or more data elements associated with the ~~first~~ presentation element in accordance with the information for locating the one or more data elements included in the ~~first~~ presentation element; and

~~presenting present~~ the one or more data elements for the client in accordance with the information describing the presentation characteristics of the one or more data elements included in the ~~first~~ presentation element.

56. (Currently amended) The medium as recited in claim 55, wherein the ~~program instructions are further computer-executable to implement repeating data presentation process is configured to repeat~~ said ~~accessing a first~~ presentation element, said ~~accessing one or more data elements~~, and said ~~presenting the one or more data elements for each of the plurality of presentation elements~~.

57. (Currently amended) The medium as recited in claim 48, ~~wherein said accessing a presentation schema in the distributed computing environment, said accessing results data for a client in the distributed computing environment, and said presenting the results data for the client are performed by a data presentation process; wherein the client~~

is executing within a first device in the distributed computing environment, and wherein the data presentation process is executing within a second device in the distributed computing environment.